

**Features**

- 2-channel
- DC version, positive polarity
- Working voltage 13 V at 10  $\mu$ A
- Series resistance max. 107  $\Omega$
- Fuse rating 100 mA
- DIN rail mounting

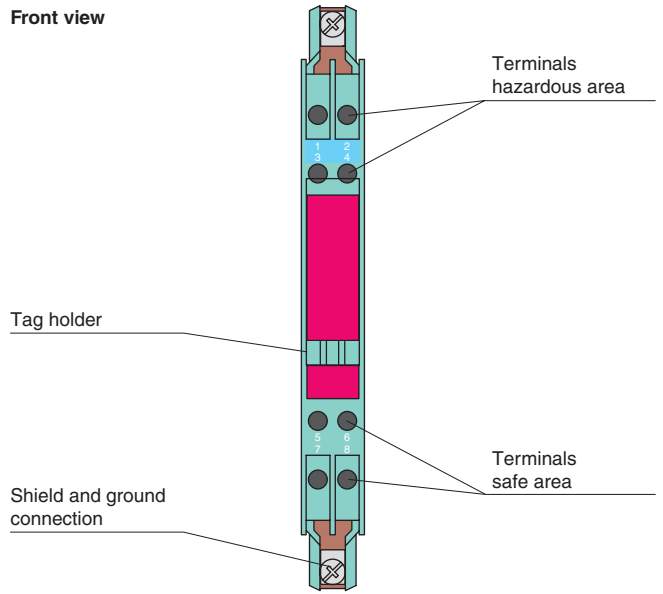
**Function**

The Zener Barrier prevents the transfer of unacceptably high energy from the safe area into the hazardous area.

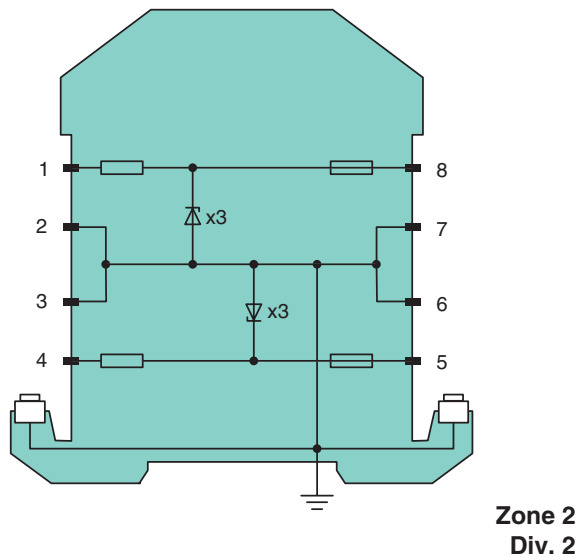
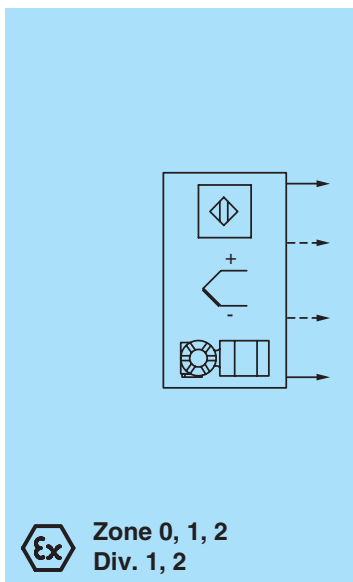
The zener diodes in the Zener Barrier are connected in the reverse direction. The breakdown voltage of the diodes is not exceeded in normal operation. If this voltage is exceeded, due to a fault in the safe area, the diodes start to conduct, causing the fuse to blow. The Zener Barrier has a positive polarity, i. e. the anodes of the zener diodes are grounded.

Depending on the application, increased or decreased intrinsic safety parameters apply for serial or parallel connection. For the detailed parameters refer to the Zener Barrier certificate. Application examples can be found in the system description of the Zener Barriers.

**Assembly**



**Connection**



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

<b>General specifications</b>		
Type		DC version, positive polarity
<b>Electrical specifications</b>		
Nominal resistance		100 Ω
Series resistance		≤ 107 Ω
Fuse rating		100 mA
<b>Hazardous area connection</b>		
Connection		terminals 1, 2; 3, 4
<b>Safe area connection</b>		
Connection		terminals 5, 6; 7, 8
<b>Working voltage</b>		
Supply loop		≤ 13.3 V
Measurement loop		≤ 13 V at 10 μA
<b>Conformity</b>		
Degree of protection		IEC 60529
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 60 °C (-4 ... 140 °F)
Storage temperature		-25 ... 70 °C (-13 ... 158 °F)
Relative humidity		max. 75 % , without condensation
<b>Mechanical specifications</b>		
Degree of protection		IP20
Connection		screw terminals
Core cross-section		max. 2 x 2.5 ... mm <sup>2</sup>
Mass		approx. 150 g
Dimensions		12.5 x 115 x 110 mm (0.5 x 4.5 x 4.3 inch)
Construction type		modular terminal housing , see system description
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate		
Marking		⊕ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I (-20 °C ≤ T <sub>amb</sub> ≤ 60 °C) [circuit(s) in zone 0/1/2]
Voltage	U <sub>o</sub>	14.7 V
Current	I <sub>o</sub>	150 mA
Power	P <sub>o</sub>	550 mW
Supply		
Maximum safe voltage	U <sub>m</sub>	250 V
Series resistance		min. 98 Ω
Permissible connection values [EEx ia]		
Certificate		
Marking		TÜV 99 ATEX 1484 X
Marking		⊕ II 3G Ex nA IIC T4 Gc [device in zone 2]
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010
<b>International approvals</b>		
FM approval		
Control drawing		116-0118
UL approval		
Control drawing		116-0139 (cULus)
IECEX approval		
		IECEX BAS 09.0142 IECEX BAS 17.0091X
Approved for		[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I Ex ec IIC T4 Gc
<b>General information</b>		
Supplementary information		Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

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